

Fig. 1

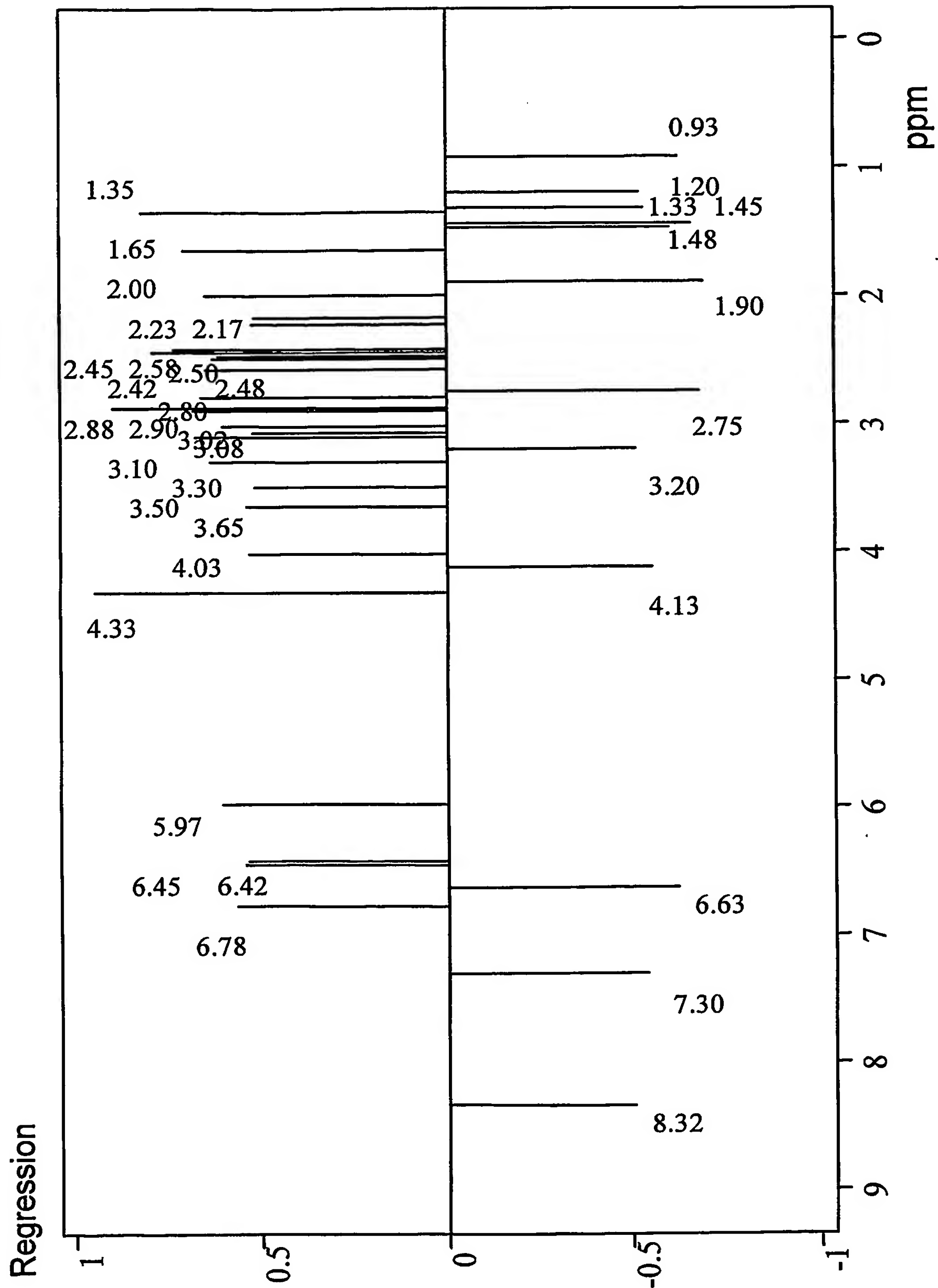


Fig. 2

Tabel 3. Characteristic metabolites applicable as biomarker(s) for Osteoarthritis.

Compound	$\delta$ (ppm $\pm$ 0.05)	Designation	Multiplicity
Lactate	1.35	CH <sub>3</sub>	Doublet
	4.05	CH	Quartet
Malate	3.13	CH <sub>2</sub>	Doublet
	3.23	CH <sub>2</sub>	Doublet
	4.33	CH	Doublet doublet
	2.40	CH <sub>2</sub>	Triplet
$\beta$ -alanine	2.88	CH <sub>2</sub>	Triplet
	8.32	CH	Doublet
Hypoxanthine	6.83	Cyclic H	Doublet
3,4-Dihydroxymandelate	6.90	Cyclic H	Singlet
	6.95	Cyclic H	Doublet
	7.03	CH	Singlet
3-Hydroxycinnamic acid (3-hydroxykaneelzuur)	7.15	Cyclic H	Doublet
	1.48	CH <sub>3</sub>	Doublet
Alanine	4.13	CH	Quartet
	2.86	CH <sub>2</sub>	Multiplet
Asparagine	2.96	CH <sub>2</sub>	Multiplet
	2.02	CH <sub>3</sub>	Singlet
N-acetyl asparate	2.56	CH <sub>2</sub>	Multiplet
	2.74	CH <sub>2</sub>	Multiplet
	4.40	CH	Multiplet
	2.0-2.9		
Aliphatic region	3.0-4.7		
Alkene region	6.3-7.5		
(Hetero)aromatic region			